

## REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 17-34, with claims 25-29 and 31 having been withdrawn from consideration. By the present response, claim 17 has been amended. Thus, upon entry of the present response, claims 17-24, 30 and 32-34 remain pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: the original claims.

Applicants wish to thank Examiners Liao and Nguyen for the courtesies extended to applicants' representative during a personal interview conducted on May 19, 2009 in the U.S. Patent and Trademark Office. During the interview, applicants' representative highlighted certain distinctions between the presently claimed invention and the disclosed compositions of the applied prior art. While no agreement was reached concerning patentability, there was a productive exchange of views regarding the interpretation of the content of the prior art references relative to the requirements of the presently claimed invention that is believed will ultimately result in advancement of the prosecution of the present application. More specifically, the possibility of submitting a declaration to present evidence to establish the lack of inherency of certain aspects of the composition described by the primary reference WO '152 was discussed. Accordingly, applicants submit herewith for consideration concurrently with the remarks appearing below, a Declaration Pursuant to 37 C.F.R. §1.132 of Simon Ibrah, Ph.D.

**CLAIM REJECTIONS UNDER 35 U.S.C. §103**

Claims 17-24, 30, 32 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WO 95/35152 (hereafter "WO '152") and U.S. Patent No. 5,057,483 to Wan (hereafter "Wan") on the grounds set forth in paragraph 3 of the Official Action. This rejection should be withdrawn.

The present invention is directed to a composition based on zirconium oxide and oxides of cerium, lanthanum and another rare earth element. Compositions formed according to the present invention are especially suitable for use as multifunctional catalysts. Compositions formed according to the principles of the present invention also exhibit exceptional surface area stability under high temperatures. This surface area stability enhances the catalytic effect of the composition. A composition formed according to certain aspects of the present invention is set forth in amended claim 17. Amended claim 17 recites:

*17. A composition based on zirconium oxide comprising cerium oxide in an atomic ratio  $Zr/Ce > 1$ , and further comprising lanthanum oxide and an oxide of a rare earth other than cerium and lanthanum, the composition having a sulphur content below 200 ppm, wherein after calcination for 6 hours at  $1150^{\circ}C$  it has a specific surface of at least  $10\text{ m}^2/g$ .*

As evident from the above, claim 17 requires, *inter alia*, a composition wherein "after calcination for 6 hours at  $1150^{\circ}C$  it has a specific surface of at least  $10\text{ m}^2/g$ ." WO '152 and Wan fail to disclose or even suggest this aspect of the presently claimed invention.

It is alleged on page 6 of the Official Action: "it appears that the claimed composition and that taught in the prior art are substantially identical and thus these other properties must be inherent" (emphasis added).

When assertions are made based upon features that are not expressly disclosed in the prior art, the Federal Circuit has repeatedly stated that in order to establish the inherency of the missing element it must be shown that the missing element must necessarily be present in the reference, and would be recognized as such by those persons of ordinary skill in the art. *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ2d 1746, 1749-50 (Fed. Cir. 1991; *In re Oelrich*, 666 F.2d 578,581, 212 USPQ 323, 326 (C.C.P.A. 1981) ("inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient"); *Standard Oil Co. v. Montedison, S.p.A.*, 664 F.2d 356, 372, 212 USPQ 327, 341 (3d Cir. 1981) (for a claim to be inherent in the prior art it "is not sufficient that a person following the disclosure sometimes obtain the result set forth in the [claim]; it must invariably happen").

When considered in light of the appropriate legal standards set forth above, it is clear that the recited surface area stability characteristic of amended claim 17 is not inherent to the composition of either *WO '052*, *Wan '483*, or any potential combination of the two.

Submitted concurrently herewith is a Declaration Pursuant to 37 C.F.R. §1.132 of Simon Ifrah, Ph.D. The Declaration presents evidence which establishes that the above-mentioned high temperature surface area stability characteristic recited by the presently claimed invention is not inherent to the composition disclosed by *WO '152*.

In fact, as reported in the Declaration, the surface area stability of a composition formulated according to the teachings of *WO '152* appears to be significantly less stable than required by the presently claimed invention.

It is further alleged on page 6 of the Official Action that: "it would have been obvious that a properly stabilized composition would have the same surface area after any calcinations." Again, the evidence presented in the attached Declaration proves otherwise. In addition, for the grounds of rejection allege that it would have been desirable to produce a material having a composition with high temperature surface area stability, the grounds for rejection are entirely devoid of any explanation as to how the composition disclosed by the cited prior art could be provided with such a high temperature surface area stability property. As such, the grounds for rejection are improper for at least this additional reason.

Claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *WO '152* and *Wan* as applied to claims 17 and 32 above, and further in view of U.S. Patent No. 6,387,338 to Anatoly et al. (hereafter "*Anatoly et al.*") on the grounds set forth in paragraph 4 of the Official Action. This rejection should be withdrawn.

*Anatoly et al.* is cited in paragraph 4, page 7 of the Official Action as allegedly teaching oxide compositions suitable for oxygen storage components having a cubic lattice structure. Based on these alleged teachings, it is further alleged that it would have been obvious in view of *Anatoly et al.* to have created a cubic structure in the composition of the presently claimed invention as recited in claim 33. However, even if the alleged teachings of *Anatoly et al.* were applied exactly as suggested in the grounds for rejection, the claimed invention would not result. Namely, the applied teachings of *Anatoly et al.* do nothing to cure the deficiencies previously

noted above in connection with the deficiencies if *WO '152* and *Wan et al.* with respect to the requirements of independent claim 17. Thus, reconsideration and withdrawal of the rejection is respectfully requested.

**CONCLUSION**

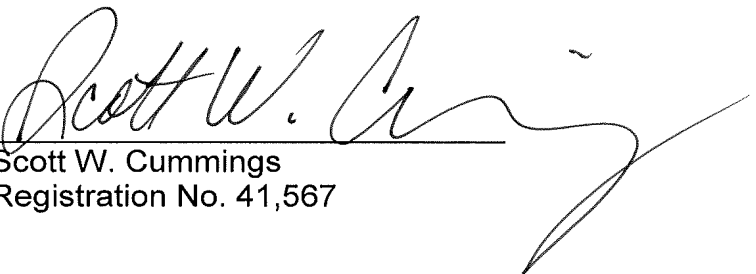
From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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